



STF 492: TD-LTE Phase 3

Status Report

Document History

- 2016-05-06: Revised for MTS#68
- 2016-03-02: Revised for SG#4
- 2016-01-27: Revised for MTS#67
 - long form for TDL Technical Session
 - revised short form for MTS#67
- 2015-09-15: Revised for MTS#66
 - long form for TDL Technical Session
 - revised long form for MTS#66
- 2015-09-15: Revised for SG#3
- 2015-07-15: Revised for SG#2
- 2015-06-02: Document submitted for MTS#65
 - long form for TDL Technical Session
 - short form to be submitted for MTS #65



Man 1: Light blue long-sleeved button-down shirt, black trousers, black shoes.

Man 2: Striped short-sleeved button-down shirt, dark shorts, brown shoes. Name tag visible.

Man 3: White short-sleeved button-down shirt, white shorts, blue sneakers. Name tag visible.

Man 4: Blue plaid short-sleeved button-down shirt, blue jeans, brown shoes. Name tag visible.

Man 5: Light blue short-sleeved button-down shirt, grey trousers, black shoes. Name tag visible.

Man 6: Orange and white plaid short-sleeved button-down shirt, blue jeans, black shoes. Name tag visible.

From the Terms of Reference...

TDL Phase 3: Goals

- Provide an open platform as a foundation for custom solutions
 - basic graphical and textual editors, validation facilities
 - semantics refinements and formalisation
- Accelerate adoption of TDL and lower barrier to entry
 - both for users and for tool vendors
 - enable integration in UML-based environments
- Contribute to public launch at UCAAT 2015

TDL Phase 3: Objectives

- Reference implementation of TDL and accompanying TR
 - hosted on an open internet platform serving as a portal for the community
- UML profile for TDL enabling the use of TDL in UML environments
- Adaptation to MM addressing CRs from the implementation
- Adaptation to GR, XF, TO according to the changes in the MM
- Extension of the capabilities of TO

TDL Phase 3: Deliverables

Del.	Work Item Code / Standard Number	Working Title / Scope
D1	RES/ES 203 119-1 V1.3.1	Test Description Language; Meta-Model and Semantics Scope: common concepts, meta-model, semantics
D2	RES/ES 203 119-2 V1.2.1	Test Description Language; Graphical Syntax Scope: TDL graphical concrete syntax for end users
D3	RES/ES 203 119-3 V1.2.1	Test Description Language; Exchange Format Scope: TDL exchange format for tool interoperability
D4	RES/ES 203 119-4 V1.2.1	Test Description Language; Structured Test Objective Specification Scope: TDL extension for structured test objectives
D5	DTR/TR 203 119REF V1.1.1	Test Description Language; Reference Implementation Scope: TDL reference implementation documentation

Status Update

Task 0: Milestones and Resources

- Milestone 4: Mar 01 2016
 - Stable Drafts: Part 2, Part 4
 - The ETSI portal states otherwise:
 - Final: Part 1, Part 2, Part 3; Stable: Part 4, TR
- Milestone 5: Mar 31 2016
 - Final Drafts: Part 1, Part 2, Part 3, Part 4, TR

Task 1

Task 1: Activities

- Implementation of graphical editors -> focus on viewing capabilities
- Implementation of textual editors covering
 - structured test objective specification extension (TDL part 4)
 - parts of the meta-model not covered in the graphical editor -> full meta-model
- Implementation of the TDL exchange format (TDL part 3)
- Implementation of the UML profile for TDL
 - integration with Eclipse Papyrus as profile reference implementation platform
 - integration with the open source "Eclipse UML Profiles Repository" project

Task 1: Activities

- Identification of change requests for the current TDL standards
 - 60 CRs resolved
 - 7 CRs open
- Setting up necessary project infrastructure and portal
 - decisions are still pending
- User and developer documentation
 - currently part of TR

Task 1: Demos

The image displays the Eclipse IDE interface for TDL (Test Description Language) development. It is divided into several windows:

- Project Explorer:** Shows the project structure for 'AnnexA1.tplan2' and its sub-components like 'cam.tplan2', 'data.tplan2', etc.
- Code Editor (Left):** Contains the TDL source code for 'MemberAssignments.tdlan2'. It defines a 'Domain' with entities (UE), events (in, sends, receives, performs, send), and a 'Test Purpose' for 'TP_7_1_3_1_1' with specific initial conditions and expected behavior.
- Code Editor (Right):** Shows a rendered table for the test case 'TP_7_1_3_1_1', detailing its objective, reference (3GPP TS 36.321 clause 5.3.1), and the specific conditions and behaviors to be tested.
- Diagram View (Bottom):** Visualizes the test case as a graph of nodes and relationships, including data elements, structured data instances, and actions.
- Properties View (Bottom):** Shows the semantic and style properties for the selected 'Interaction m1', such as its name, source gate, and test objective.

Task 2

Task 2: Activities

- Mapping to TDL stereotypes and UML meta-classes
 - Annex C of ES 203 119-1
- TDL UML profile abstract syntax according to the mapping
 - part of reference implementation
- Automated derivation of UML profile specification
 - future work
- Specification of formal constraints and UML superstructure restrictions to prevent invalid application of the TDL profile
 - future work

Task 3

Task 3: Activities

- Formalisation of static semantics by means of OCL constraints
 - validation and refinement of existing constraints
 - also transferred to the reference implementation
- Addressing change requests arising from the implementation
 - 39 CRs (big part related to constraints)
 - 4 CRs still open (1 due to typo, to be closed shortly)

Task 4

Task 4: Activities

- Extension of the structured test objective specification
 - Reference component instances in events
 - Reference test configurations in test objectives
 - Event occurrence templates
 - Iterative and periodic event sequences
- Addressing change requests arising from the implementation
 - Part 2: 8+1 (fixed+open) CRs
 - Part 3: 2+0 (fixed+open) CRs
 - Part 4: 11+2 (fixed+open) CRs

Future of TDL

- ToR draft submitted on May 3
- Main focus: Mapping TDL to TTCN-3
- Additional themes:
 - maintenance
 - new features (test configuration operations)
 - requirements for security and performance
- New STF to start in September (if approved)

Any other business?

